REMARKS

Responsive to the Official Action mailed June 1, 2004, Applicants provide the following remarks. Reconsideration and allowance of the subject application is respectfully requested.

Rejection over Davies et al.

In response to the Applicant's previously submitted comments, Claims 16-19 have now been rejected under 35 U.S.C. §103(a) as obvious in light of Davies et al. (U.S. Patent No. 5,345,222). While the Examiner acknowledges that the Davies reference does not disclose the structure of the claimed invention, the Examiner has made the supposition that "it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that that wrap-around member 53 would have functioned the same as separate top and bottom members in an antenna such as taught by Davies et al..."

We respectfully disagree.

The wrap-around "member" 53 is actually an insulated conductive layer that functions as a conductive flux-confining box as an alternative to the flux-confining box 42 of Figure 4. Davies quite clearly requires that this conductive layer wrap around an insulating former 52, 54 in order to function for its intended purpose, as with the flux-confining box of Figure 4.

As required by the Manual of Patent Examining Procedure and the patent laws, if a proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. In re Gordon, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984). If insulated conducting layer 53 were split as suggested by the Examiner, then it would be modified away from its ***intended*** purpose as set forth in Davies et al., which is to trap and conduct the magnetic flux around the "flux-confining box".

We further respectfully note that, as required by the Manual for Patent Examining procedure and the patent laws, the prior art reference must teach or suggest all the claim limitations in order to maintain a rejection for obviousness under 35 USC 103(a). The mere fact that references **can** be combined or modified does not render the resultant combination obvious

unless the prior art also suggests the desirability of the combination. In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). MPEP 2143.

There is no teaching or suggestion in Davies et al. that conducting layer 53 can be formed as two separate members instead of forming a "flux-confining box" and still function for its express intended purpose of contain magnetic flux.

We respectfully submit that the supposition that one of ordinary skill in the art might nonetheless make these modifications contrary to their express functions as set forth in Davies does not satisfy the requirements for obviousness under 35 USC 103(a). Accordingly, we respectfully request that the rejection be withdrawn.

Rejection over Davies et al. with Yoshizawa et al.

Claims 12-15, and 20-25, and 32 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Davies et al. in view of Yoshizawa et al. (U.S. Patent No. 5,567,537). As noted above, Davies discloses a solid core article surveillance system. Yoshizawa discloses a laminated thin film magnetic core element having a high Q value for use in PC cards and the like.

In response to the Applicant's previously submitted comments, the Examiner has suggested that "the combination of Davies et al. and Yoshizawa et al. was made to minimize the antenna size using techniques/materials taught by Yoshizawa et al. for the EAS interrogation antenna of Davies, that is, the antenna size is minimized within the context of not changing the antenna's intended EAS interrogation function."

However, we respectfully note that this is not the claimed invention. The core in the claimed invention is not ***minimized*** in size as suggested by the Examiner, it is "***of at least a minimum*** size for operably generating of an electromagnetic field for interrogation and detection of electronic article surveillance markers." It must be at least large enough (i.e., "of at least a minimum size") to interrogate and detect EAS markers, while still having the claimed structure.

This is opposite to the teachings of Yoshizawa et al.

Yoshizawa teaches in column 5, lines 57-58, that the "thickness of the laminated magnetic core is 3mm or less, preferably 1mm or less." When read in view of the remaining disclosure in Yoshizawa, it is clear that Yoshizawa is teaching a thin film antenna to be used in

an IC card, and achieving the highest Q value possible in the smallest antenna. Thus, the laminated thin film disclosed in Yoshizawa is not, in and of itself, of "at least a minimum size for operably generating an electromagnetic field for interrogation and detection of surveillance markers," as in the claimed invention, it is much smaller.

One of ordinary skill in the art would need some motivation from the Yoshizawa reference in order to adapt this thin film for use in a detection system as disclosed in Davies.

However, because the very purpose of the laminate disclosed in Yoshizawa is to **reduce** antenna size, we respectfully submit that the hypothetical combination of that reference with Davies would not motivate one of ordinary skill to adapt that antenna to **increase** its size contrary to this express teaching and along the lines of the claimed invention.

Similarly, in regard to Claims 24 and 25, Yoshizawa combined with Davies would lead one of ordinary skill in the art ***away*** from the larger core needed in the claimed invention.

In regard to Claim 32, we respectfully note that Yoshizawa teaches toward a higher Q value (at least 25 or more, preferably 35 or more, and more preferably 40 or more -- as indicated in column 5, lines 58-60). We also respectfully note that in Figure 3 of Yoshizawa, and the remaining examples disclosed therein, Yoshizawa is teaching towards maximizing the Q value, and not towards minimizing it as in the claimed invention.

The example referred to by the Examiner in section 3) at the bottom of page 5 of the Office Action actually refers to a comparative example from which Yoshizawa et al. are teaching ***away***. Thus, one would not be motivated to modify Yoshizawa toward the claimed invention.

In regard to Claim 12, we note that, Davies does not disclose a core having a central member disposed between a first outer member and a second outer member, as in the claimed invention. We respectfully submit that Yoshizawa fails to cure this deficiency of Davies. Yoshizawa clearly shows its layers having equal length (e.g., Figure 2).

In regard to Claim 15, the hypothetical combination of Davies and Yoshizawa teaches away from the claimed size of the core as noted above.

In regard to Claims 20-22, Yoshizawa teaches away from the claimed invention, thus one of ordinary skill in the art would not be motivated to combine these references to adapt the methodology of Davies along the line of the claimed invention.

Accordingly, we respectfully request that the rejection under 35 U.S.C. §103 be withdrawn.

Rejection over Davies et al. with Yoshizawa et al. and Balch et al.

Claims 26-29 and 31 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Davies et al. in view of Yoshizawa, et al. and Balch, et al. (U.S. Patent No. 6, 118, 378). As discussed above, neither Davies nor Yoshizawa, whether taken alone or in a hypothetical combination, teaches or suggests the claimed invention, including a core and coil having at least a minimum size for operably generating an electromagnetic field for interrogating and detecting electronic surveillance markers. We respectfully submit that Balch fails to satisfy the deficiencies of Davies and Yoshizawa. Accordingly, we respectfully request that the rejection under 35 USC §103 be withdrawn.

Rejection over Davies et al. with Yoshizawa et al. and Martinides

Claims 28-31 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Davies, et al. in view of Yoshizawa, et al. and Martinides (U.S. Patent No. 5,371,490). As discussed above, Davies and Yoshizawa fail to teach or suggest, whether alone or in hypothetical combination, the core and coil of the claimed invention. We respectfully submit that Martinides fails to satisfy these deficiencies in Davies and Yoshizawa. Martinides discloses a system for electronic safeguarding against burglary and nowhere teaches or suggests a core and coil being of at least a minimum size to operably generate an electromagnetic field for interrogating and detecting electronic surveillance markers.

Accordingly, we respectfully request that the rejection under 35 U.S.C. §103 be withdrawn.

Respectfully submitted,

9/1/04
Date

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Attorney Docket No. C4-599